

What is claimed is:

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1. A laser processing apparatus comprising:
a laser generator for generating a laser light,
a laser controller for controlling said laser generator,
a positioning unit for positioning the laser light, and
a position controller for controlling a position of said positioning
unit in a manner according to a moving distance of said positioning unit.
 - 10 2. The laser processing apparatus of claim 1, further comprising
a control method memory for storing a control method corresponding to
the moving distance of said positioning unit, wherein said position
controller controls the position of said positioning unit by the control
method.
 - 15 3. The laser processing apparatus of claim 2, wherein said
control method memory stores a step position command control method for
the moving distance less than a first threshold.
 - 20 4. The laser processing apparatus of claim 2, wherein said
control method memory stores a step speed command control method for
the moving distance equal to or greater than a second threshold and less
than a third threshold.
 - 25 5. The laser processing apparatus of claim 2, wherein said
control method memory stores a trapezoidal speed command control
method for the moving distance equal to or greater than a fourth threshold
or more.

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6. The laser processing apparatus of claim 1, further comprising an acceleration/deceleration constant memory for storing an acceleration/deceleration constant corresponding to the moving distance, wherein said position controller controls the position of said positioning unit with using the acceleration/deceleration constant.

7. The laser processing apparatus of claim 1, further comprising an acceleration/deceleration constant calculating unit for calculating an acceleration/deceleration constant corresponding to the moving distance from the moving distance, wherein said position controller controls the position of said positioning unit with using the acceleration/deceleration constant.

8. The laser processing apparatus of claim 1, further comprising a waiting-for-settling time memory for storing a waiting time for settling corresponding to the moving distance, wherein said positioning unit controls the position with using the waiting time for settling.

9. The laser processing apparatus of claim 1, further comprising a waiting-for-settling time calculating unit for calculating a waiting time for settling corresponding to the moving distance from the moving distance, wherein said positioning unit controls the position with using the waiting time for settling.

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